(c) According to a preliminary assessment the wind power potential in the country is estimated to be over 20,000 MW. Wind Sprveys are being undertaken in 21 States/UTs with a view to identifying windy regions and to assess the wind power potential. So far, Gujarat, Andhra Pradesh, Tamil Nadu and Karnataka are known to have significant wind potential. Preliminary estimates of potential in Tamil Nadu and Gujarat are placed at 5,000 MW each. Recent estimate of potential in the Southern Region of Andhra Pradesh is about 800 MW. The actually exploited potential is given above in the reply to part (b).

(d) and (e) Yes, Sir. The Government is aware that the first offshore windfarm in the world has been build in the island of Holland, Denmark. However, there is no proposal at present to build an off-shore wind farm project in the country.

Sources of energy

4794. SHRI TINDIVANAM G. VENKATARAMAN: Will the PRIME MINISTER be pleased to state:

(a) what are the other sources of power production apart from solar energy; and

(b) whether solar energy production would meet the future demands of energy?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI SUKH RAM): (a) In addition to Sloar Energy, power is produced through Wind, Mini-Micro Hydro and Biomass, which are renewable, dependable and widely available sources of energy. The non-conventional energy power generation projects/system of about 147 MW aggregated capacity have been installed upto March, 1992. The status of installation of power eneration units based on various renewable energy sources including Solar Energy and likely installation to be taken up during 1992-93 is given in the attached statement. (*See* beow)

(b) The country receives Solar Energy equivalent to about 5,000 trillion KWhr per year in aggregate terms. Low temperature Solar Thermal technologies have been developed and ar being utilised for meeting heating requirements in various sectors of utilisation for domestic, industrial, commercial institutional and community applications. With the large scale dissemination and continuous upgradation of these technologies, it may become possible to largely meet heating energy requirements in different sectors.

The prospects of power production from Solar Energy will depend on the availability of technology that can convert Solar Energy into electricity in a cost effective manner. At present, Solar Photovoltaic power systems are cost effective in only remote, unelectrified areas for small power applications. Similarly, thermal route for generation of power from Solar Energy, presently, is also costlier. With research & development and improvements in technologies and increased production of equipments, reduction in cost is expected and consequently the prospects of power production from Solar Energy to meet the futre demands of energy to meet the future demands of energy are expected to improve.

Statement

Status of non-conventional energy power generation units installed and likely to be takun during 1992-93

S.No.	Source Technoogy	Capacity (MW)	
		Installed-upto March, 92	Lilely to be taken up during 1992-93
1	Wind	40.00	10.00
2	Mini-Micro Hydel	86.53	9)00
3	Biomass Based Cogeneration . . .	10.00*	6.00 (Equivalent
4	Solar Photovolaic	*3.40	0.16
5	Solar Thermal	0.07	..
6	Bomass safires/Stirling Engine . .	7.50	0a20 (Equivalent)

*July, 92

Subsidy for boosting sale of Solar Ovens

4795. SHRI TINDIVANAM G. VENKATARAMAN: Will the PRIME MINISTER be pleased to state:

(a) whether any subsidy is given in setting "Solar Ovens" produced by Government departments; and

(b) if not, whether Government propose to popularise and boost up sales of Solar Ovens?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI SUKH RAM): (a) Government Departments are not producing Solar Ovens in the country. The Central Government is providing Rs. 150/- per solar cooker as subsidy to the users. The solar cookers are being manufactured by private industry.

(b) Apart from subsidy, use of solar cooker is being popularised through different media like print, electronic, training publishing literature etc. In order to ascertain the quality of solar cookers Indian Standard on Solar Cookers has been introduced from current financial year throngh Bureau of Indian Standards. Other indirect incentives such as exemption on excise duty, central sales tax etc. are also being provided.

Seminar on tapping the sea resources

4796. SHRI KRISHAN LAL SHARMA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that a seminar, held recently in the capital, has stressed on the need of tapping sea resources of the country;

(b) what were the other points discussed in the seminar;

(c) whether Government have accepted any proposal emerging from the seminar; and

(d) if so, the action taken thereon?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND THE MINISTER OF STATE IN THE